Nolim autem ut hæc malo animo dicta putes, ſive in Heuratium *(qui mihi neque beneficio neque injuria notus eſt,) ſive in Cl.* Hugenium, *quem magni ſemper habui, atque habiturus ſum, & amiciſſime ſemper tractavi; ejuſq; atq; inventorum ſuorum non iniquus fuerim æſtimator; nedum in* Fermatium, *ſummum virum: ſed ut nudæ veritati teſtimonium perhiberem,* Nelioque *jam demortuo; iiſque ex noſtris omnibus, qui, jamdiu ante* Heuratium, *id ipſum demonſtraverant; atque, ne malæ fidei habear, in ea quam hac de re narrationem prius edidi. Vale.*

Two other Letters to the ſame purpoſe with the former: The firſt of the Right Honourable the Lord Viſ-count Brouncker, *Chancellor to her Majeſty, and Preſident of the* R. Society, *&c.*

SIR,

It is very ſure, that Mr. *William Neil* had in the year 1657. found out and demonſtrated a Streight line equal to a Paraboloeid; and did then communicate and publiſh the ſame (though not in print) to my ſelf and others, who uſed to meet at *Greſham* Colledge, and it was there received with good approbation; and the ſame was, preſently afterwards, otherwiſe demonſtrated by my ſelf and others: And therefore ancienter than that of Monſieur *Heurat*, which (as it ſeems,) is not pretended to have been done before the year 1659; and ancienter too than that of Sr. *Ch. Wren*, finding a Streight line equal to a Cycloid in the year 1658; and by him admitted ſo to be. Nor ought it at all to prejudice Mr. *Neil*, that M. *Heuraet's* was ſomewhat ſooner abroad in print, than that of M. *Neil*, (though both in the ſame year 1659;) ſince it is well known to many of us, that Mr. *Neil's* was done before. Otherwiſe M. *Hugens*, by the ſame reaſon, will grant the precedency to *Heuraet*, of that which he now claims to be his own invention (that Rectifying the Parabolical Line and Squaring the Hyperbolical Space do mutually depend on each other:) for this was publiſhed in print by M. *Heuraet* (or M. *Schooten* for him) in the year 1659, and not by M. *Hugens* till now, 1673: And yet M. *Hugens* thinks, he may well claim that invention to be his own, becauſe he now tells us, that he found it out about the end of the year 1657, and did (ſome time after) communicate it privately to ſome friends. And whereas, he doth ſuppoſe, that this invention of his might give occaſion to that other of *Heuraet*; we may alſo as well ſuppoſe, that he might have taken ſuch occaſion from hearing of Mr. *Neil* having done the like, (for this had been then commonly known for a great while:) Or might have taken occaſion (as well as Mr. *Neil*) from that of Dr. *Wallis Schol. prop.* 38. *Arith. Infin.* or from that of Sr. *Ch. Wren* having found a Streight equal to another Curve the year before: Or, if it were neceſſary to know their ſymbolization between the Parabolical Line and the Hyperbolical Space; he might have had it earlier from Dr. *Wallis*. For, when he had demonſtrated (*Schol. prop.* 38. *Ar. Infin.*) that the Particles which compoſe the

Parabolical line, are in power equal to a *Series* of Squares increaſed by a ſeries of Equals, ſuppoſe $\surd : A^2 + b^2$: And (*prop.* 35, 41. *Conic. Sect.*) that *c* the Ordinates to the Conjugate Diameter of an Hyperbola, (that is, the particles of which that Hyperbolical ſpace conſiſteth,) are ſo alſo, *viz.* $\surd : \frac{A}{4}T^2 + \frac{T}{L}h^2$: (where *A*, *T*, *L*, are permanent quantities, and *b*, *h*, taken ſucceſſively in Progreſſion Arithmetical ;) It was eaſie (for M. *Heuraet*, or M. *Hugens*, or any other,) to infer, That, if we can Rectifie the one, we may Square the other, *& vice verſa*. But from whence ſoever M. *Heuraet* had it ; we may, as before, reaſonably conclude, that Mr. *Neil* had it before him : And M. *Hugens* is a perſon of that ingenuity, that, when he ſhall better conſider of it, he will (I doubt not) be of the ſame mind. *London, Oct.* 8. 1673.

The other Letter is of Sr. Chriſtopher Wren *Kt. Surveyor General of his Majeſties Buildings*, *&c.*

SIR,

THat I did, in the year 1658. find a *Streight* line equal to that of a *Cycloid*, and the parts thereof, was then very well known, not in *England* only, but in *France* and *Holland*. And I have not yet heard of any, who do pretend to have known it, before I diſcover'd it : which was the ſame year acknowledged in Print by thoſe of *France*. But I do not pretend to have been the *firſt* that did ever find a Streight line equal to a Crooked. For I very well know, that Mr. *William Neil* had, the year before, found out and demonſtrated, How to conſtruct a Crooked line ſo as to be equal to a Streight, by a certain ſeries of Numbers after the method of Dr. *Wallis*. And though *He* did not therein demonſtrate the other properties of that Line ; yet the ſame were preſently after demonſtrated by my ſelf and others, and the nature of the Line fully diſcover'd, being a certain *Paraboloeid*. And that which M. *Heurat* is ſaid afterwards to have found out, in the year 1659, and M. *Fermat* in the year 1660, are but the ſame with that of Mr. *Neile*.

An Accompt